#### Handout: Module 4, Interleaving

## Essence of the Interleaving Strategy<sup>1-4</sup>

Interleaving is mixing your practice of old, current, and upcoming information within a given subject area during each study session.

#### Advice for Students<sup>1-4</sup>

During each study session, devote some effort to recall older information while you work to understand more recent material and to prepare for upcoming topics in the same course.

## Advice for Faculty<sup>1-4</sup>

During each class, ask students questions about previously covered material in addition to discussing new information. Assign homework problems that involve a mix of material in the course and give cumulative exams.

## **Recommended Readings on Interleaving**

Presented in alphabetical order, the books below provide an excellent detailed description of learning science. Below each, I have noted particular chapters from each that relate to interleaving. You may also wish to look in each book's index under such terms as *interrupted practice* and *mixed practice* for additional, relevant information.

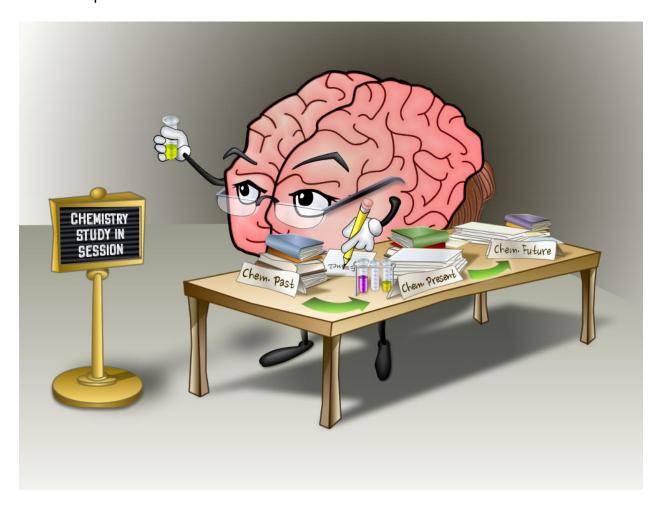
- 1. Brown PC, Roediger HL III, McDaniel MA. <u>Make It Stick: The Science of Successful Learning</u>. Cambridge, MA: Belknap Press of Harvard University Press, 2014. Chapter 3, *Mix Up Your Practice*
- 2. Carey B. How We Learn: The Surprising Truth about When, Where, and Why It Happens. New York, NY: Random House, 2014. Chapter 8, Being Mixed Up: Interleaving as an Aid to Comprehension
- 3. Doyle T, Zakrajsek T. <u>The New Science of Learning: How Learn in Harmony with Your Brain</u>. Sterling, VA: Stylus, 2013. Chapter 5, *Patterns and Learning*
- 4. Oakley B. A Mind for Numbers: How to Excel at Math and Science (Even If You Flunked Algebra). New York, NY: Jeremy P. Tarcher/Penguin, 2014. Chapter 4, Chunking and Avoiding Illusions of Competence: The Keys to Becoming an "Equation Whisperer"

# References Associated with the Interleaving Video

<sup>1</sup>For more information about mixing up your practice, please see pages 46-66 (Chapter 3) in: Brown PC, Roediger HL III, McDaniel MA. <u>Make It Stick: The Science of Successful Learning</u>. Cambridge, MA: Belknap Press of Harvard University Press, 2014 **and** pages 51-82 (Chapter 4) in: Oakley B. <u>A Mind for Numbers: How to Excel at Math and Science (Even If You Flunked Algebra)</u>. New York, NY: Jeremy P. Tarcher/Penguin, 2014.

<sup>2</sup>For more information about creating and refining learning chunks, please see pages 51-82 (Chapter 4) and pages 112-125 (Chapter 7) in: Oakley B. <u>A Mind for Numbers:</u> <u>How to Excel at Math and Science (Even If You Flunked Algebra)</u>. New York, NY: Jeremy P. Tarcher/Penguin, 2014.

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